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HEWLETT-PACKARD COMPANY
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EXAMINER

TO, JENNIFER N

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2195

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/616,883	Applicant(s) ROMERO, FRANCISCO J.	
	Examiner JENNIFER N. TO	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-25, and 27-33 are pending for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-25, and 27-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 1, and 28 contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For example, claims 1, 28 recited "wherein the system is not required to obtain information from a load balancer", however, examiner unable to find the written description requirement to support the claimed limitation. Therefore, claims 1, 28 are rejected as failing to comply with the written description requirement.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following terms lacks antecedent basis:
 - i. the instructions – claim 25.
- b. The claim language in the following claims is not clearly understood:
 - i. as per claim 1, line 18, it is not clearly understood what is meant by "each domain groups a subset of the resources" (i.e. each domain including a subset of resources).
 - ii. as per claim 6, it is uncertain whether the domain data of claim 6 is the same or different than the domain data of claim 1. Appropriate correction is required.
 - iii. as per claims 2-25, they are rejected for incorporating the above errors from their respective parent claims by dependency.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-23, and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan et al. (hereafter Srinivasan) (U.S. Publication No. 2004/0111725), and in view of Stone (U.S. Patent No. 6823382).

8. Srinivasan and Stone were cited in the previous office action.

9. As per claim 1, Srinivasan teaches the invention substantially as claim including a system comprising:

a processor for executing instructions of a monitoring agent to monitor application data for compliance with policy data (abstract, lines 11-13; application scheduler; paragraphs [009], [0058]), wherein the system is not required to obtain information from a load balancer (the system of Srinivasan obtain information (i.e. information on application performance data, resource usage data from the performance data collector (paragraph [0028]) to determine the policy violation for the applications, thus Srinivasan did not obtain the information from a load balancer. In addition, paragraph [0024] of Srinivasan disclosed that the function of the load balancer is to route the request and managing the connections between applications and users, not to enforce the monitor application data for compliance with policy data);

storage that is accessed due to the instructions executing on the processor, wherein the storage stores (paragraph [0058]):

resource data, the resource data including information on a plurality of resources, the resources including a plurality of computers (paragraphs [0024]-[0025]);

application data, the application data including one or more application profiles, each application profile having a performance profile and a resource profile, the resource profile including resource utilization information (abstract; paragraphs [009], [0021], [0033]-[0042], i.e. paragraph [0039], usage information is the application data include the performance profile of the application, and the resource usage information) ; and

policy data, the policy data including one or more application performance policies and one or more resource utilization policies (fig. 3; paragraphs [009], [0033]-[0037]).

10. Srinivasan did not specifically teach domain definition data including information on a plurality of domains where each domain groups a subset of the resources, wherein resources associated with a single domain are allocated for different types of applications.

11. However, Stone teaches domain definition data including information on a plurality of domains where each domain groups a subset of the resources, wherein resources associated with a single domain are allocated for different types of applications (col. 7, lines 17-27).

12. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of Srinivasan and Stone because

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both of Srinivasan and Stone teaching of monitoring performance of server computers and applications. In addition Stone teaching of domain definition data, the domain definition data including information on a plurality of domains, each domain comprising a grouping of one or more computers, one or more of the domains being a cluster would improved the integrity of Srinivasan's system by providing a system that capable of monitoring and controlling server computers and applications (Stone, col. 1, lines 9-10).

13. As per claim 2, Srinivasan teaches that wherein at least one of the applications comprises an aggregate application executing on at least two of the computers (paragraph [0021]).

14. As per claim 3, Srinivasan teaches that wherein the monitoring agent is further to perform arbitration within a domain grouping one or more of the computers in response to a violation of one of the application and resource policies (paragraphs [0037], [0042], the application scheduler in response to the policy violations perform the modification actions...migrate the application instance to another server).

15. As per claim 4, Srinivasan teaches that wherein the monitoring agent is further to expand a domain grouping one or more of the computers in response to a policy violation (paragraphs [0025], [0038]).

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16. As per claim 5, Srinivasan teaches that wherein the monitoring agent is further to contract a domain grouping one or more of the computers (paragraph [0037]).

17. As per claim 6, Stone teaches domain definition data, the domain definition data including information on a plurality of domains, each domain comprising a grouping of one or more computers, one or more of the domains being a cluster (col. 7, lines 17-27).

18. As per claim 7, Stone teaches that wherein the cluster comprises a first container executing a set of replicated instances of an application on a first set of nodes and a second container having a second set of nodes (col. 7, lines 17-27).

19. As per claim 8, Stone teaches that wherein the monitoring agent is further to transfer a node from the second container to the first container in response to a violation of one of the policies (col. 9, lines 10-33).

20. As per claim 9, Stone teaches that domain definition data having information on a plurality of domains, each domain comprising a grouping of one or more computers, the domain definition data further including information on the resource utilization of a domain (col. 7, lines 17-36; col. 13, lines 34-45).

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21. As per claim 10, Srinivasan teaches that wherein the resource profile further includes resource demand information on the amount of resources an application requires (paragraph [0024]).

22. As per claim 11, Srinivasan teaches that wherein the resource utilization information includes resource consumption information on the amount of resources an application is currently assigned (paragraphs [0029]-[0033]).

23. As per claim 12, Srinivasan teaches that wherein the resource utilization information includes at least one of resource consumption information on the amount of resources an application is currently using, and resource consumption information on the amount of resources an application has used over a period of time (paragraph [0039]).

24. As per claim 13, Srinivasan teaches that wherein one of the computers is associated with a container to execute one of the applications (paragraph [0037]).

25. As per claim 14, Srinivasan teaches that wherein one of the computers is associated with a plurality of containers, each container to execute one of the applications (paragraph [0037]).

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26. As per claim 15, Srinivasan teaches that wherein the policy data further includes one or more container utilization policies, each utilization policy associated with one of the containers (paragraph [0037]).

27. As per claim 16, Srinivasan teaches that wherein at least one of the containers is a partition (paragraph [0037]).

28. As per claim 17, Srinivasan teaches that wherein the monitoring agent is further to resize the partition in response to a violation of one of the policies (paragraph [0038]).

29. As per claim 18, Srinivasan teaches that wherein the partition is a hardware partition (paragraph [0037]).

30. As per claim 19, Srinivasan teaches that wherein the partition is a software-based partition (paragraphs [0037]).

31. As per claim 20, Srinivasan teaches that wherein at least one of the containers is a processor set (paragraph [0037]).

32. As per claim 21, Srinivasan teaches that wherein at least one of the containers is a sub-CPU resource partition (paragraph [0037]).

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33. As per claim 22, Srinivasan teaches that wherein the performance information includes response time (paragraph [0040]).

34. As per claim 23, Srinivasan teaches that wherein one or more of the application profiles includes resource allocation information for the associated application (paragraph [0021]).

35. As per claim 27, Srinivasan teaches that wherein the performance policies have a relative associated priority (paragraph [0033]).

36. As per claim 28, it is rejected for the same reason as claim 1 above. In addition, Stone teaches that each application executing in a container associated with a domain, each domain including one or more resources (fig. 2; col. 7, lines 17-36; col. 13, lines 34-45, each tier comprise one or more server).

37. As per claim 29, Srinivasan teaches that wherein the first container comprises a partition and expanding the first container comprises resizing the partition (paragraph [0038]).

38. As per claim 30, Stone teaches that wherein the domain associated with the first container comprises a cluster (fig. 2).

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39. As per claim 31, Stone teaches that wherein expanding the first container comprises transferring a node associated with a second container, the second container being in the domain associated with the first container, to the first container (col. 9, lines 10-33).

40. As per claim 32, Stone teaches that in response to a second policy violation, providing a message to a user (col. 5, lines 43-51; col. 8, lines 9-19).

41. As per claim 33, Stone teaches that wherein the message comprises a message that a lower priority policy cannot be met (col. 5, line 59-60; col. 14, line 64 through col. 1, line 16).

Response to Arguments

42. Applicant's arguments with respect to claims 1-25, and 27-33 have been considered but are moot in view of the new ground(s) of rejection.

43. In the remark, applicant argued that:

(1) Srinivasan fails to teach the system is not required to obtain information from a load balancer;

(2) Stone fails to teach domain definition data including information on a plurality of domains where each domain groups a subset of the resources, wherein resources associated with a single domain are allocated for different types of applications.

44. Examiner respectfully disagreed with applicant argument.

As to point (1), Srinivasan clearly teaches the system is not required to obtain information from a load balancer (see office action, paragraph 9 above). In addition, the claim recited "obtain information" and not clear as to what type of information, and also the recited limitation did not show any relation between "the system is not required to obtain information from a load balancer" with the rest of the claim limitations.

As to point (2), applicant point out col. 6, lines 44-50 of Stone which disclosed the tiers included backup list and alternate-server list and argued that Stone fails to teach domain definition data including information on a plurality of domains where each domain groups a subset of the resources wherein resources associated with a single domain are allocated for different types of applications is incorrect. Examiner cited col. 7, lines 17-27 of Stone to support the claimed limitation not col. 6, lines 44-55.

According to Stone, col. 7, lines 17-27, the tier configuration contain a list of servers for each tier, and tiers configuration associated applications with server machine or nodes on a tier basis, and also a list of backup and alternate servers can be used, not necessary as to tier only contains a list of backup and alternate servers. Therefore, Stone teaches domain definition data including information on a plurality of domains

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where each domain groups a subset of the resources, wherein resources associated with a single domain are allocated for different types of applications.

Allowable Subject Matter

45. Claims 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

46. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO 892 form for details).

47. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

48. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER N. TO whose telephone number is (571)272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

49. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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